

TVA'S 2004 PROGRESS REPORT FOR EXECUTIVE ORDER 13148

Section 502 - Release Reduction: Toxic Chemicals

In accordance with the guidance issued by the Federal Environmental Executive, TVA is not reporting on this section for CY2004.

Section 503 - Use Reduction: Toxic Chemicals, Hazardous Substances, and Other Pollutants

In accordance with the guidance issued by the Federal Environmental Executive, TVA is not reporting on this section for CY2004.

Section 505 - Phase Out of Ozone Depleting Substances (ODS)

TVA has decided to discontinue the use of its central repository for ODS (otherwise known as the Freon Bank). The entire inventory of this repository was offered to the Department of Defense. Removals have not yet begun.

Environmental Management Systems

Agency Level Criteria

1. Agency level Policies

Agency has incorporated the EMS goals and requirements of EO13148 into existing agency environmental directives, policies and documents.

E.O. 13148 goals have been incorporated and met. All 56 appropriate facilities have an EMS and training for senior management has been deployed.

TVA's Environmental Policy and Principles, approved by the TVA Board on January of 2001 includes a commitment for a comprehensive Environmental Management System (Attachment 1). It was completed in March 2002 for full implementation in the field by October 2002. At that point, the scope of EMS auditing covered all EMS processes.

An EMS awareness video was developed in 2001 and presented to senior management. It has been provided to your office. Some facilities developed supplemental EMS training for use at their site.

2. Self Declaration Protocol

Agency has issued a Self-Declaration Protocol based on the Federal Self-Declaration Protocol guidance.

TVA developed its Self Declaration Procedure in 2004 and the VP of Environmental Policy and Planning issued it (Attachment 2). TVA's self declaration is based on two phases to match the two levels of our program, corporate and facility. Since the facility EMS implementation is based on corporate level documents, the corporate level will be

declared first. The facilities will then be given the option of having a supplemental environmental review conducted by our independent, internal auditing staff using a modified GEMI checklist to measure conformance to ISO 14001.

The corporate level has received an independent, third party review. Our management review process will undergo some changes prior to self declaration. Once the corporate level portion of the EMS has been self declared, facilities will be notified of the option to individually self declare. This approach has been communicated through TVA's Environmental Peer Team consisting of senior environmental representatives from strategic business units owning the facilities.

3. Resources Distributed

Agency has provided resources (e.g. dollars, FTE) for EMS implementation to its appropriate facilities.

Since TVA does not receive appropriations from Congress, a specific budget request for EMS development and implementation was not made. EMS management and operations are staffed and funded in the corporate Environmental Policy and Planning organization. Facility EMS implementation is integrated with other environmental operations and relies on existing resources. No separate budget designations are made.

Facility Level Criteria

1. Current list of "appropriate facilities" for EMS Implementation

Agency has updated the list of facilities where an EMS will be implemented.

TVA's list of Appropriate Facilities has not changed from last year and there are still 56 (Attachment 3).

Appropriate facilities are defined as groupings of facilities or operations that are on contiguous property or under the span of control of one manager. By defining the scope and boundary this way, we parallel our internal auditing approach. This facilitates the assignment of corrective action to the appropriate, responsible manager.

2. Facilities with measurable objectives and targets

Percent of appropriate facilities that have documented measurable environmental objectives and targets.

75 percent have documented measurable environmental objectives and targets.

3. Facilities with environmental management programs

Percent of appropriate facilities that have established environmental management programs specifically to achieve each of their environmental objectives and targets.

79 percent of these facilities have established management programs specifically to achieve each of their environmental objectives and targets

4. Facilities with awareness training program

Percent of appropriate facilities that have developed a program for EMS awareness training.

96 percent have an EMS Awareness training program.

TVA POLICY AND PRINCIPLES ON THE ENVIRONMENT

Environmental Policy

As a regional development agency and the nation's largest public power provider, TVA is committed to protecting the environmental resources of the Tennessee Valley. We continually improve the environmental performance of our operations. We balance sustainable development of the Valley's natural resources with supplying low cost, reliable power. We sustain the Valley's resources for future generations through leadership in clean energy innovation and environmental management.

Environmental Principles

TVA adopts the following business principles in support of our environmental policy:

Management Commitment

- Integrate responsible environmental practices into business operations by establishing goals, measuring progress, and reporting performance through a comprehensive environmental management system.
- Factor environmental considerations into business decisions.
- Train TVA employees on their environmental responsibilities, expect them to use effective environmental processes, and hold them accountable for their performance.

Environmental Compliance

- Comply with environmental laws and regulations.
- Assess the effects of TVA operations on the environment.
- Operate with a goal of continuous improvement.

Environmental Protection and Stewardship

- Manage the competing demands on the river system and Valley resources by optimizing their value to diverse stakeholder interests.
- Practice responsible environmental stewardship of the Valley's natural resources.
- Encourage our customers, suppliers, and partners to do the same.

Pollution Prevention and Control

- Minimize the effects of our operations on the environment through a combination of:
 - Demand side management,
 - Source reduction,
 - Recycling and reuse, and
 - Pollution control.

Partnerships/Public Involvement

- Build partnerships through effective two-way communications with our stakeholders and customers.
- Solicit and respond to public input that enables regional influence over regional resources.

Innovation and Technology Development

- Use our integrated power system as a living laboratory to showcase energy innovations and solutions.
- Develop technologies and expertise to serve the public good by finding new and better solutions for environmental protection.




TVA Standard
Department
Procedure


TITLE
EMS Self-Declaration Procedure


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Rev. 0000
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Effective Date 11-10-04

Prepared by: Performance Analysis and Reporting

Concurred by:  11/9/04
Myron L. Iwanski, Manager, Environmental Auditing Date

Concurred by:  11/9/04
Warren P. Behlau, Manager, Performance Analysis and Reporting Date

Approved by:  11/9/04
John W. Shipp, Jr., Vice President, Environmental Policy and Planning Date

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Revision Log

Revision or Change Number	Effective Date	Affected Page Numbers	Description of Revision/Change
0	11-10-04	All	Initial issue.

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1.0 PURPOSE

This procedure defines TVA's Environmental Management System (EMS) self-declaration method.

2.0 SCOPE

This procedure addresses:

A. EP&P responsibilities and instructions for:

1. Conducting facility self-declaration evaluations (SDEs).
2. Evaluating EMS conformance to a standard.
3. Managing and approving TVA and facility EMS self-declarations.

B. Methodology used for TVA to:

1. Self-declare conformance to International Organization for Standardization (ISO) 14001 as implementation of EMS requirements in Executive Order 13148, Greening of the Government Through Leadership in Environmental Management, Federal Register, Volume 65, April 21, 2000.
2. Meet guidance contained in Environmental Management System Agency Self-Declaration Protocol for Appropriate Federal Facilities, dated September 13, 2003, issued by the Office of the Federal Environmental Executive (OFEE).
3. Evaluate EMS conformance to ISO 14001 Environmental Management Systems - Specification with Guidance for Use.

3.0 PROCEDURE

3.1 Roles and Responsibilities

Performance Analysis and Reporting (PA&R)

- A. Interfaces with OFEE and represents TVA on the Executive Order 13148 Interagency Environmental Management EMS Sub-Workgroup.
- B. Conducts supplemental review for incorporation into a facility self-declaration report.
- C. Recommends EMS self-declarations for approval by the Vice President of EP&P (VP-EP&P) and facility managers.
- D. Prepares final self-declaration reports.
- E. Ensures EMS self-declarations are communicated internally and externally in accordance with TVA-SPP-5.7 Communications and Stakeholder Involvement Process.
- F. Makes arrangements for periodic non-EP&P, independent TVA EMS reviews.

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3.1 Roles and Responsibilities (continued)

- G. Tracks EMS self-declarations for re-evaluation at least once every four years.
- H. Maintains this procedure, ensuring its review and revision at least every two years, or whenever substantial operational changes require its revision, whichever is earlier.

Environmental Auditing (EA)

- A. Conducts EMS SDEs requested by facilities.
- B. Prepares facility SDEs.
- C. Recommends EMS self-declarations for approval by the VP-EP&P and facility managers.

VP-EP&P

- A. Approves the TVA EMS self-declaration.
- B. Approves facility EMS self-declarations in conjunction with facility management.

3.2 Eligibility and Criteria

- A. Self-declaration is accomplished in two phases: at the TVA level and then for facilities. The second phase may begin after the TVA EMS self-declaration is approved.
- B. Any TVA facility/operation that receives an EMS audit conducted by EP&P may request an EMS SDE. Participation in EMS self-declaration is voluntary.
- C. In consultation with PA&R, EA has selected (or developed) and maintains the modified Global Environmental Management Initiative (GEMI) ISO 14001 Self Assessment Checklist as part of the evaluation guide for facility EMS self-declaration in accordance with the protocol for Federal facilities. EA provides this guide and any subsequent revisions to PA&R.
- D. Based on EA and PA&R recommendations, the VP-EP&P approves EMS self-declaration designations. A facility-level designation is co-approved by the facility manager.

3.3 Conduct of EMS Self-Declaration Reviews

3.3.1 Qualifications

- A. Internal EMS audits are managed by EA Lead Auditors certified in accordance with Appendix B requirements in EP&P-SDP-5.7 Environmental Auditing Procedure. Each Lead Auditor for EMS SDEs is an ISO 14001 EMS and Compliance Certified Professional Environmental Auditor from the Board of Environmental Auditor Certifications (BEAC).

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3.3.1 Qualifications (continued)

- B. PA&R staff that recommend EMS self-declaration approvals are Certified Environmental Systems Managers from the National Registry of Environmental Professionals, or possess BEAC certifications noted in Section 3.3.1A.
- C. Non-EP&P, independent TVA EMS reviews are conducted by trained and qualified external auditors that are American National Standards Institute - Registrar Accreditation Board certified.

3.3.2 Frequency

- A. As established in Appendix A of EP&P-SDP-5.7, EA determines the frequency of internal EMS audits by using a risk-based approach.
- B. A re-evaluation of a self-declaration is conducted at least every four years. It is completed on each subsequent audit to maintain continuous “self-declared” status.
- C. PA&R requests a non-EP&P, independent review of the TVA EMS and the self-declaration program at least every four years.

3.3.3 TVA EMS Self-Declaration

- A. TVA-level EMS processes and activities are reviewed for conformance by a non-EP&P, independent auditor (i.e., qualified third-party audit contractor).
- B. The non-EP&P, independent auditors compare TVA’s EMS to ISO 14001, and provide a written report which identifies EMS nonconformances and recommends corrective actions.
- C. PA&R oversees the management and documentation of corrective and preventive actions in accordance with TVA-SPP-5.12 Corrective and Preventive Action Process.
- D. Upon completion of appropriate corrective actions, the non-EP&P, independent auditors recommend self-declaration of the TVA EMS.
- E. The VP-EP&P approves and issues a TVA EMS self-declaration statement that an ISO 14001 EMS is in place at TVA.

3.3.4 Facility EMS Self-Declaration

- A. After TVA EMS self-declaration is achieved, facilities are given the option to have a SDE conducted in conjunction with a regularly scheduled audit.
- B. EA conducts internal EMS audits in accordance with the requirements of Section 3.4 of EP&P-SDP-5.7.
- C. EA gives the facility manager the option of receiving a SDE. This is communicated in the audit announcement letter.

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3.3.4 Facility EMS Self-Declaration (continued)

- D. EA conducts facility SDEs to determine if, as a minimum:
 - 1. Strategic Business Unit (SBU)/Business Unit (BU) and facility EMS documents conform to ISO 14001.
 - 2. SBU/BU and facility EMS documents conform to the TVA EMS.
 - 3. Practices conform to ISO 14001 and EMS document requirements.
- E. If an SDE is requested, EA uses the modified GEMI ISO 14001 Self-Assessment Checklist and ISO 14001 as evaluation guide(s).
- F. In addition to the standard audit report, EA prepares and distributes SDEs to the PA&R Manager and the VP-EP&P. These evaluations identify specific EMS deficiencies, potential causes, and recommendations for improvements.
- G. When a facility SDE is requested, EA reviews higher-level SBU/BU EMS documents as part of the SDE.

3.3.5 Self-Declaration Evaluations and Recommendations

- A. PA&R reviews the facility SDE, conducts a supplemental review, and prepares additional recommendations.
- B. PA&R combines the SDE and supplemental review into a draft self-declaration report.
- C. The VP-EP&P, EA Manager, and PA&R Manager meet to discuss the draft report. A self declaration recommendation is jointly reached, and the draft report is amended as agreed.
- D. After the meeting, the VP-EP&P sends the draft self-declaration report to the facility manager. At this time, the facility environmental representative and appropriate managers and staff may discuss the self-declaration conclusions and recommendations with PA&R and EA.
- E. After any facility discussion is held, the PA&R Manager and EA Manager finalize their sections of the self-declaration report, and the PA&R Manager provides the consolidated, final report to the VP-EP&P.
- F. The VP-EP&P issues the final recommendation and self-declaration report to site and SBU/BU management and requests notification of closure of open environmental PERs, if any.
- G. Corrective and preventive actions to satisfy EMS and regulatory nonconformances are managed and documented in accordance TVA-SPP-5.12.
- H. Once significant, open environmental PERs are closed, EA verifies closure and jointly provides a recommendation for self-declaration with the PA&R Manager to the VP-EP&P.

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3.4 Self-Declaration Approval and Communication

- A. Based on recommendations from the PA&R Manager and EA Manager, the VP-EP&P decides whether or not to issue a self-declaration statement that an ISO 14001 EMS is in place. The self-declaration certificate is signed by the facility manager and the VP-EP&P.
- B. PA&R ensures that an EMS self-declaration is communicated internally and externally in accordance with TVA-SPP-5.7. One or more of the following communication vehicles is used:
 - 1. Quarterly Environmental Performance Report
 - 2. TVA InsideNet Environmental Information Center (Center)
 - 3. TVA Today
 - 4. InsideTVA
 - 5. Environmental Report distributed to the public
 - 6. External TVA web site
 - 7. News releases
- C. After receipt of a facility-level self-declaration approval, the facility may use the approved EMS self-declaration designations, as established by the VP-EP&P (e.g., seal for correspondence, Certificate, or flag).
- D. PA&R ensures that EMS SDE checklists(s) and this procedure are:
 - 1. Provided to the OFEE.
 - 2. Made available to SBUs/BUs and facilities by posting on the Center.
- E. PA&R interfaces with OFEE and represents TVA on the Executive Order 13148 Interagency Environmental Management EMS Sub-Workgroup, ensuring that TVA is kept informed of Federal activities associated with EMS development and implementation.

3.5 Self-Declaration Re-Evaluations

- A. TVA and facility EMS self-declaration approvals are re-evaluated at least every four years, consistent with the requirements of this procedure.
- B. PA&R tracks when a TVA EMS re-evaluation is needed and requests a non-EP&P, independent review.

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3.5 Self-Declaration Re-Evaluations (continued)

- C. PA&R tracks when facility re-evaluations are needed and advises EA.
- D. EA schedules and conducts facility SDEs to support re-evaluations within the four-year timeframe.

4.0 RECORDS

4.1 QA Records

None.

4.2 Non-QA Records

The following records are managed in accordance with the TVA EMS Records Management Process (or TVA-SPP-5.13, when available):

- A. Environmental Audit Correspondence (includes EMS self-declaration reports, recommendations, and approvals)
- B. Corrective Action Data

5.0 DEFINITIONS

EMS Self-Declaration - A program used by Federal agencies and their facilities or organizations to self-declare conformance with a specific EMS standard. The program provides for effective and objective evaluation of the EMS in a manner that ensures the system is conformant to the selected standard and also designed for ongoing evaluation and continual improvement.

Enclosure 3

TVA List of Appropriate Facilities

Facility Name		Location	
	Main Site	Non-contiguous Sites	
1	Bellefonte Nuclear	NA	<i>Hollywood, AL</i>
2	Browns Ferry Nuclear	NA	<i>Decatur, AL</i>
3	Sequoyah Nuclear	NA	<i>Soddy-Daisy, TN</i>
4	Watts Bar Nuclear	NA	<i>Spring City, TN</i>
5	Western Area Radiological Lab	NA	<i>Muscle Shoals, AL</i>
6	Allen Fossil Plant	NA	<i>Memphis, TN</i>
7	Bull Run Fossil Plant	NA	<i>Clinton, TN</i>
8	Colbert Fossil Plant	NA	<i>Tuscumbia, AL</i>
9	Cumberland Fossil Plant	NA	<i>Cumberland City, TN</i>
10	Gallatin Fossil Plant	NA	<i>Gallatin, TN</i>
11	John Sevier Fossil Plant	NA	<i>Rogersville, TN</i>
12	Johnsonville Fossil Plant	NA	<i>New Johnsonville, TN</i>
13	Kingston Fossil Plant	NA	<i>Harriman, TN</i>
14	Paradise Fossil Plant	NA	<i>Drakesboro, KY</i>
15	Shawnee Fossil Plant	NA	<i>West Paducah, KY</i>
16	Widows Creek Fossil Plant	NA	<i>Stevenson, AL</i>
17	Muscle Shoals Power Service Shops	NA	<i>Muscle Shoals, AL</i>
18	Distributed Generation	Albertville Diesel Generators	<i>Albertville, AL</i>
		Perry W. Davis Diesel Generators	<i>Meridian NAS, MS</i>
19	Coal Mining and Reclamation	Fabius	
		Flat Woods	
20	Watts Bar HED Facility	NA	<i>Spring City, TN</i>
21	Safety and Emergency Response Training Academy	NA	<i>New Hope, TN</i>
22	Kemper County CT	NA	<i>DeKalb, MS</i>
23	Lagoon Creek CT	NA	<i>Brownsville, TN</i>
24	Hiwassee Family	<i>Hiwassee Hydro</i>	<i>Murphy, NC</i>
		Appalachia Hydro	
		Blue Ridge Hydro	
		Chatuge Hydro	
		Nottely Hydro	
25	Chickamauga Family	<i>Chickamauga Hydro</i>	<i>Chattanooga, TN</i>
		Nickajack Hydro	
		Tims Ford Hydro	

26	Boone Family	<i>Boone Hydro</i>	<i>Kingsport, TN</i>
		Ft. Patrick Henry Hydro	
		South Holston Hydro	
		Watauga Hydro	
		Wilbur Hydro	
27	Cherokee Family	<i>Cherokee Hydro</i>	<i>Rutledge, TN</i>
		Douglas Hydro	
		Norris Hydro	
28	Ft. Loudoun Family	<i>Ft. Loudon Hydro</i>	<i>Lenoir City, TN</i>
		Fontana Hydro	
		Melton Hill Hydro	
29	Ocoee Family	<i>Ocoee #1 Hydro</i>	<i>Benton, TN</i>
		Ocoee #2 Hydro	
		Ocoee #3 Hydro	
30	Watts Bar Family	<i>Watts Bar</i>	<i>Spring City, TN</i>
		Great Falls Hydro	
31	Guntersville Hydro	NA	<i>Guntersville, AL</i>
32	Kentucky Hydro	NA	<i>Grand Rivers, KY</i>
33	Pickwick Hydro	NA	<i>Pickwick Dam, TN</i>
34	Raccoon Mountain Pumped Storage	NA	<i>Chattanooga, TN</i>
35	Wheeler Hydro	NA	<i>Town Creek, AL</i>
36	Wilson Hydro	NA	<i>Muscle Shoals, AL</i>
37	Non Power Dams		Tennessee Valley Region
38	Regenesys Project	NA	
39	Buffalo Mountain Wind Turbines	NA	
40	Eastern Region Watershed Teams	Cherokee-Douglas	
		Clinch Powell	
		Hiwassee	
		Little Tennessee	
		Melton Hill	
		Upper Holston	
41	Western Region Watershed Teams	Chickamauga-Nickajack	
		Guntersville	
		Kentucky	
		Pickwick	
		Wheeler	
42	Transmission Operations and Maintenance (TOM) North	5 Transmission Service Centers	
		Transmission Lines	
		Ancillary Facilities	
43	TOM East	5 Transmission Service Centers	
		Transmission Lines	
		Ancillary Facilities	

44	TOM West	5 Transmission Service Centers	
		Transmission Lines	
		Ancillary Facilities	
45	Transmission Line Construction		
46	Substation Construction		
47	Telecommunication Construction		
48	System Applied Maintenance		
49	Contract Construction		
50	Helicopter Maintenance Muscle Shoals		<i>Muscle Shoals, AL</i>
51	Chattanooga Area Facilities		<i>Chattanooga, TN</i>
52	Chickamauga Power Service Center		<i>Chattanooga, TN</i>
53	Hartsville		<i>Dixon Springs, TN</i>
54	Knoxville Area Facilities		<i>Knoxville, TN</i>
55	Muscle Shoals Area Facilities		<i>Muscle Shoals, AL</i>
56	Watts Bar Fossil		<i>Spring City, TN</i>